



## Gulf of Mexico Harmful Algal Bloom Bulletin

21 April 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: April 18, 2005

**Conditions:** A harmful algal bloom has been identified in Manatee and Sarasota Counties. Patchy moderate to high impacts are possible in Manatee County and very low impacts in Sarasota County today through Saturday, particularly in the afternoons. Very low impacts likely Sunday through Monday in both counties.

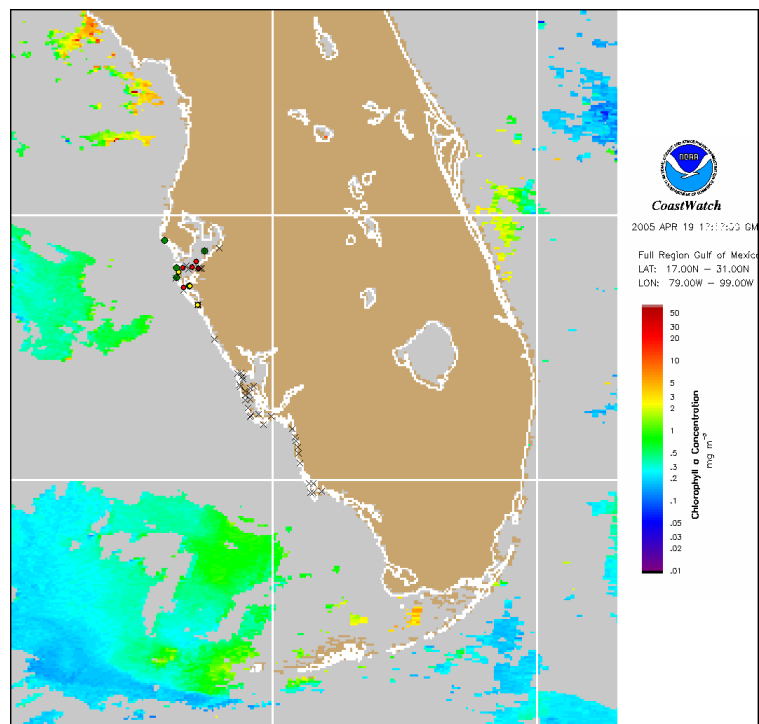
**Analysis:** SW Florida - Recent satellite imagery has been obscured by clouds. Imagery from April 18 indicated continued dissipation of the bloom and weakening in chlorophyll levels along the coast. A maximum chlorophyll concentration of approximately  $8\mu\text{g/L}$  near the mouth of Tampa Bay ( $27^{\circ}31'\text{N}$ ,  $82^{\circ}40'\text{W}$ ) was evident in the April 18 imagery. Movement of the bloom is constricted by the bay systems; extent, intensity and location have likely been maintained since last reported. Onshore winds forecasted during the afternoons today through Saturday may cause patchy moderate to high impacts within Palma Soda Bay and very low impacts within Sarasota Bay.

**Cedar Key:** FWRI reported a visual sighting of reddish discoloration 3-5 miles west of Cedar Key on April 13. No recent imagery or sampling is available to report on the present status of this feature. Imagery on April 18 continued to indicate a large band of chlorophyll along the coast, with prominent southerly expansion of the feature to  $29^{\circ}19'\text{N}$ ,  $85^{\circ}32'\text{W}$ . Chlorophyll was generally less than  $7\mu\text{g/L}$ . Further southerly movement has likely occurred since April 18. Sampling is recommended.

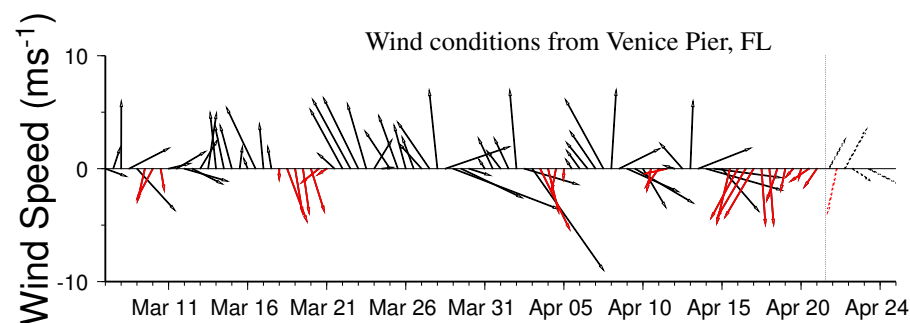
**Keys:** No recent samples or imagery are available in the Keys. April 18 imagery indicates a chlorophyll high of approximately  $6\mu\text{g/L}$  northwest of Marathon. ~Fisher, Bronder, Stolz

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. These data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Distribution for military, or commercial purposes is NOT permitted.
3. There are restrictions on Internet/Web/public posting of these data.
4. Image products may be published in newspapers. Any other publishing arrangements must receive OrbImage approval via the CoastWatch Program.

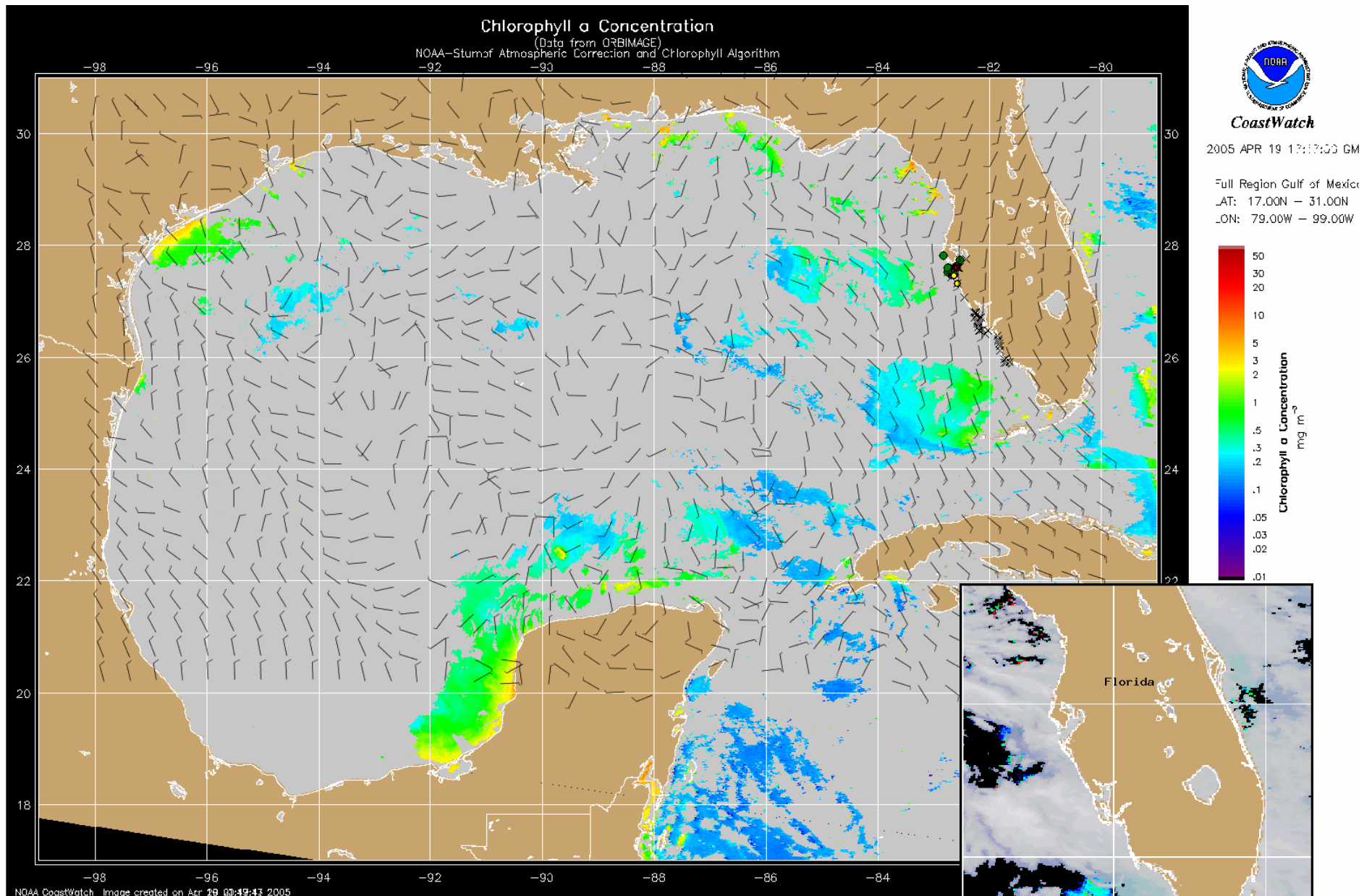


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from April 1, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

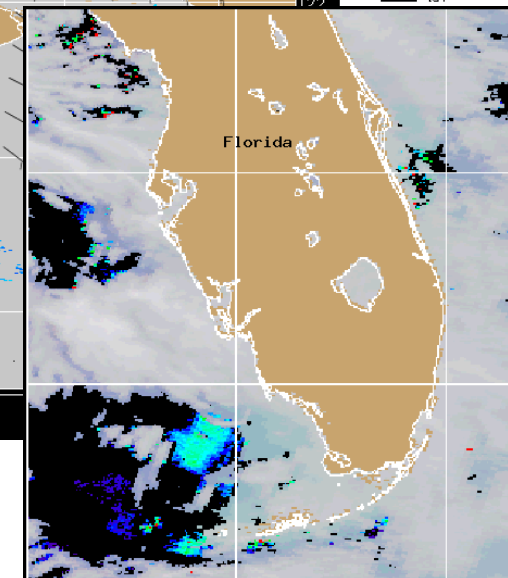


Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Mild (5-10kts, 3-5m/s) southeast winds today will become onshore in the afternoon, then shift easterly tonight into tomorrow. Winds expected to become onshore again Friday afternoon. Southwesterly winds Friday night will strengthen (15-20kts, 8-10m/s) into Saturday afternoon and shift to westerlies. Strong winds will continue Saturday night out of the northwest (westerlies at 10-15kts forecasted prior to midnight south of Venice) and remain through Monday, gradually weakening to 10-15kts (5-8m/s).



Chlorophyll concentration from satellite and forecast winds for April 22, 2005 12Z with cell concentration sampling data from April 1, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Blooms shown in red (see p. 1 analysis and image for interpretation)